

And since by this line of reasoning we are able to determine conclusively, as it seems to me, the type species of the genus *Picus*, it is quite unnecessary to employ the method by which Mr. Sharpe divides the genus *Strix* (Ibis, 1875, p. 324 *f*), useful though that method is when the type cannot be ascertained at all. If we were to reason in the present instance as Mr. Sharpe might, we should conclude that *Picus viridis* was the typical species, and that *Dendrocopos martius* was the proper name for the Black Woodpecker—a view from which I must entirely dissent.

XXI.—*Notes on some Hawks of the Subgenera Cooperastur and Urospizias.* By JOHN HENRY GURNEY.

(Plate VIII.)

Accipiter, or, to speak more exactly, *Cooperastur poliogaster* (Temm.), has been for many years only known by the type specimen at Leyden. It has now ceased to be unique, as a second specimen, said to be from the Amazons valley, has been acquired by Messrs. Salvin and Godman, who have very kindly permitted me to examine it. It is an adult bird; and the following are its measurements compared with those of the type specimen in the Leyden Museum, the latter being taken from Mr. Sharpe's Catalogue, vol. i. p. 121.

	Culmen without cere. in.	Wing. in.	Tail. in.	Tarsus. in.	Middle toe <i>s. u.</i> in.
In coll. of Salvin & Godman	·70	9·10	6·80	1·90	1·45
In Leyden Museum	·85	9·80	7·80	2·15	1·40

An inspection of this specimen convinces me that Bonaparte was quite right in assigning this species to his subgenus *Cooperastur**, it being a typical species of that section of the subgenus in which the underparts are immaculate, and which includes *C. pileatus* and *C. bicolor*, and is designated

* *Vide* Rev. et Mag. de Zool. 1854, p. 538.



J.G.Keulemans lith.

Hanhart imp

UROSPIZIAS ALBOGULARIS

as "Section A" in the summary of this subgenus given in the 'Exotic Ornithology,' p. 170.

Messrs. Salvin and Godman's specimen of *C. poliogaster* agrees with Mr. Sharpe's description of the type in the Leyden Museum, with the following exceptions:—The wing-coverts are not "darker" than the back, though they are somewhat browner, as are also the primaries and secondaries; but the tertials are rather more slaty, like the scapulars; there is no tint of rufous on, or adjacent to, the shafts of the wing- and tail-feathers; the first primary has one white bar on the inner web, and the other primaries have two such bars; the flanks, abdomen, and under tail-coverts are white, like the throat; but the upper breast and the thighs are slightly tinged with grey.

Next to *C. poliogaster*, the scarcest species of the subgenus is *C. pectoralis*, a specimen of which has also been recently added to the collection of Messrs. Salvin and Godman; this example is a fine adult female from Sarayacu, in Ecuador; the following are its principal measurements:—

Wing.	Tail.	Tarsus.	Middle claw <i>s. u.</i>
in.	in.	in.	in.
11·55	8·50	2·30	1·80

The Norwich Museum has lately been indebted to the good offices of the Rev. Canon Tristram for the opportunity of acquiring an immature specimen of *Urospizias albigularis* (G. R. Gray), which was obtained at Makira harbour, San Christoval island, in the Solomon group, by Lieut. Richards, R.N.

This specimen, which was killed on 27th August 1878, is in immature plumage, with the exception of a few feathers of the adult dress, which are apparent both on the upper and under surface, and which suffice to identify it satisfactorily with *U. albigularis*, the type specimen of which was also obtained in the island of San Christoval.

The immature plumage of this species has not, I believe, been hitherto described; and the following particulars and accompanying figure (Plate VIII.) of the specimen in the

Norwich Museum may therefore prove acceptable to the readers of 'The Ibis :—

The forehead is black next the cere, the adult dress having apparently been there assumed ; on the remaining upper part of the head the feathers are white at the base, then bright rufous for a short space, and beyond that are largely tipped with dark rufous brown, the white bases of the feathers being most conspicuous on the hinder head ; the nape is blackish brown, slightly tinged with rufous, and probably shows the commencement of adult coloration on that part ; the sides of the head are coloured like the nape, but are hardly so dark ; over the eye is a yellowish-white eyebrow, with dark hair-like shaft-marks on each feather ; the entire mantle, with the exception of three adult black feathers, is a rich rufous, broadly crossed with blackish-brown transverse bars ; all the wing-feathers are similarly coloured and cross-barred ; but the tertials and the inner webs of the secondaries and primaries have a ground-colour which, except towards the tips, is a paler rufous than the rest of the upper surface ; the ground-colour of the tail is rufous, considerably suffused with slaty grey on the basal moiety of the rectrices, this tint being strongest on both webs of the central pair, and limited on the other rectrices to the external webs only, the tail is crossed by dark blackish-brown bars, of which there are eight on the central, and sixteen on the external rectrices ; the ground-colour of the entire under surface, from the chin downwards, is a paler rufous than the upper parts ; the centre of the throat and the chin exhibit pure white feathers intermixed with those that are fulvous ; and the sides of the throat are fulvous white, mingled with blackish brown ; these parts show evident marks of the commenced assumption of adult plumage, as does also a single pure white feather on the breast ; with the exception of this feather the breast and flanks are a clear rufous, with broad sagittate marks of dark rufous brown on the centres of the feathers ; the under wing-coverts are a bright rufous brown, with a few dark shaft-marks and one white adult feather ; the axillaries are pale rufous, crossed with bars of dark rufous brown ; the tibiæ are

pale rufous, with faint sagittate marks of darker rufous; the under tail-coverts are pale rufous. According to a note attached to the skin by the collector, the irides were bright yellow, the feet were orange, and the bird was a male.

The wing-measurement of this specimen is 8.35 inches, the tarsus 2.1, and the middle toe *s. u.* 1.4. According to Mr. Sharpe's Catalogue of Accipitres, p. 120, the wing of the type specimen in the British Museum measures 10 inches, and the tarsus 2.65, indicating that the example in the British Museum is a female, and that the still larger *Urospizias meyerianus* (Sharpe) is not, as supposed by Count Salvadori*, the female of *U. albigularis*, but a distinct and larger species.

The Norwich Museum is also indebted to Canon Tristram for the acquisition of an immature female of *Urospizias approximans* from the island of Lifu, in the Loyalty group, which fully bears out the observation of the Messrs. Layard in 'The Ibis' for 1880, p. 222, as to the "singularly rufous" coloration of some of the young specimens obtained by them from that locality, of which this individual is one. Like those gentlemen, I at first doubted whether this specimen was really referable to *U. approximans*†, never having seen a young example of that species so rufescent, especially as regards the broad rufous edgings to the feathers of the mantle, the dimensions being also rather less than is usual in females of *U. approximans*; but the Norwich Museum having subsequently obtained an immature South-Australian male of that species in a very similar stage of plumage, and almost as rufous as the Lifu specimen, I have now no doubt that the latter was correctly referred by the Messrs. Layard to *U. approximans*; and I think it likely that these unworn rufous margins to the feathers of the mantle may indicate that the specimens on which they are found have but recently left the nest.

The adult birds of *U. approximans*, and also of *U. torquatus*, are subject to considerable variation, both as regards the tint and the intensity of the transverse rufous bars on

* *Vide* Orn. Pap. e Molucc. vol. i. p. 45.

† *Conf.* Canon Tristram's remarks *suprà*, p. 135

the underparts. In *U. approximans* the commonest cast of colouring on these parts is that represented in the figures of this species in Gould's 'Birds of Australia'*; but specimens with a more rufous colouring of these bars are not infrequent. A male of this description from the Swan River, which closely agrees with Mr. Gould's plate of his "*Astur cruentus*," is preserved in the Norwich Museum; but another male and a female from the same locality, which are also preserved there, are of the ordinary type of colouring most frequent in adults of *U. approximans*. These three specimens agree in size with the usual dimensions of *U. approximans*.

I may add that Mr. E. P. Ramsay's remarks on West-Australian examples of *U. approximans*, in the 'Proceedings of the Linnean Society of New South Wales,' vol. iii. p. 174, may be consulted with advantage, and are the result of a wider series of observations than I have had the opportunity of making.

The specimen in the Cambridge Museum from which Mr. Sharpe drew up the description of "*Astur cruentus*" in his Catalogue of Accipitres, p. 127, seems to me to be an adult female of *U. approximans*; and I believe that Mr. Sharpe is also now disposed to refer it to that species†; but it has the rufous bars on the underparts paler than is the case in any other example that I remember to have examined. The locality where it was obtained is, if I mistake not, unknown.

New-Caledonian specimens of *U. approximans* do not appear to me to differ from Australian, the colouring of the adult bird resembling, so far as I have observed, the ordinary type represented in Mr. Gould's plate already referred to.

The following measurements are taken from specimens of

* Since the above reference to Mr. Gould's great Australian work was penned, that veteran ornithologist has been removed from amongst us; and I cannot omit this opportunity of paying a tribute of respect to the memory of so eminent a naturalist, and one whose friendship I was privileged to enjoy for more than forty years.

† *Conf.* Sharpe on "Ornithology of S.E. New Guinea," in Journal of Linnean Society, Zoology, vol. xiii. p. 489.

U. approximans in the Norwich Museum; the sex of those marked with an asterisk was determined by Mr. Layard; in the other cases the sex has been inferred from the dimensions.

	Wing.	Tarsus.	Middle toe s. u.
<i>Males.</i>	inches.	inches.	inches.
New Caledonia	9.80	2.60	1.40
*Ditto	10.85	2.90	1.60
Queensland	10.50	2.80	1.50
Ditto, Port Curtis	10.40	2.75	1.40
Melbourne	10.70	2.90	1.70
Adelaide	10.50	2.90	1.55
Ditto	10.55	2.90	1.50
Swan River	10.40	2.75	1.40
Ditto	10.30	2.70	1.50
<i>Females.</i>			
*Lifu, Loyalty Islands	10.80	2.60	1.70
*New Caledonia	10.80	2.70	1.60
*Ditto	11	2.70	1.60
*Ditto	11.60	2.80	1.70
Ditto	11.20	2.60	1.50
Swan River	11.70	3.20	1.90
Tasmania	11.55	3.20	1.90

It may be useful to compare with the foregoing measurements the following, taken from specimens of the nearly allied species *Urospizias torquatus*, all which have been measured by myself, with the exception of those in the British Museum, for the particulars of which I have been indebted to the kindness of Mr. Seebohm. The sex has been inferred from the dimensions in those cases in which no authority is given.

	Wing.	Tarsus.	Middle toe s. u.
<i>Males.</i>	inches.	inches.	inches.
East Timor (British Museum, ♂ according to Mr. Wallace)	8.70	2.50	1.30
Yule Island (Norwich Museum, ♂ according to Sig. d'Albertis)	9.30	2.30	1.30
<i>Females.</i>			
East Timor (British Museum, ♀ according to Mr. Wallace)	9.75	2.60	1.65
Ditto, ditto	9.80	2.70	1.60

	Wing.	Tarsus.	Middle toe s. u.
<i>Females.</i>	inches.	inches.	inches.
East Timor (British Museum, ♀ according to Mr. Wallace)	10	2·60	1·54
Ditto, ditto	9·50	2·80	1·65
Ditto, ditto	9·50	2·65	1·50
Ditto, ditto	10·60	2·50	1·65
East Timor (Norwich Museum, ♀ according to Mr. Wallace)	9·50	2·30	1·40
East Timor (Norwich Museum)	10·20	2·60	1·50
Yule Island (Norwich Museum, ♀ according to Sig.d'Albertis)	10·30	2·50	1·50
Port Moresby, New Guinea (Norwich Museum)	10·40	2·60	1·60
New Ireland (♀ according to the Rev. G. Brown)	9·50	2·40	1·50
Aneiteum, New Hebrides (in collection of Canon Tristram)	9·80	2·40	1·40

The specimen from Aneiteum, above referred to, was kindly lent to me by Canon Tristram, who has mentioned it already in 'The Ibis' (*suprà*, p. 136). Allowing for individual variations of tint, to which, as I have previously observed, this species is liable, I do not think that this example, the only one I have seen from the New Hebrides, is separable from those which I have examined from New Guinea.

The only specimen I have seen from the New-Britain group is that from New Ireland recorded in the P. Z. S. for 1879, p. 447, by Dr. Selater, who recently was so good as to lend it to me. On comparing it with adult specimens from New Guinea and with Canon Tristram's Aneiteum bird, which is also adult, I observed the following differences, due, I have no doubt, to the New-Ireland specimen's not having fully, although very nearly, attained its adult livery:—It has the transverse bars on the breast browner and less rufous, and they are also not quite so well defined, showing slight central prolongations downwards along the shafts of the feathers; the thighs are rufous, with the bars of a darker rufous, but somewhat irregular and ill-defined; the interspaces between the cross bars on the under wing-coverts are much tinged with

dark rufous; and the interspaces on the axillaries are similarly but less strongly tinged; the mantle is dark brown, with dull rufous edgings to the upper tail-coverts; the rufous nuchal collar is imperfect, being limited to the sides of the nape.

This New-Ireland specimen resembles that from Anciteum, and all those that I have examined from New Guinea, in having the white under tail-coverts transversely barred with rufous; but in two adult females from East Timor that are preserved in the Norwich Museum, these coverts are an immaculate white, with no cross bars; and Mr. Seebohm, who has been so good as to examine for me the specimens in the British Museum, all of which are also from East Timor, informs me that such is likewise the case in six out of the seven specimens contained in that collection, but that in the seventh, which is immature, the under tail-coverts are barred.

On the other hand, Count T. Salvadori, referring to this species in his 'Prodromus' (p. 7, note), wrote thus, "*Specimina in Nova Guinea meridionali collecta cum speciminibus Timoriensibus omnino conveniunt*," a statement which he subsequently confirmed in 'The Ibis' for 1879, p. 319.

Professor Schlegel, in his 'Museum des Pays-Bas,' *As-tures*, p. 39, speaks of this species as having, when adult, "*couvertures inférieures de la queue blanches; dessous de l'oiseau depuis la gorge jusqu'à l'anus d'un blanchâtre traversé par de nombreuses bandes étroites d'un roux pâle*," and enumerates the following adult specimens as then existing in the Leyden Museum—viz. one from Sumbawa, two from Timor, and two from Samao, near to Timor.

Of these specimens the Professor figures on pl. 17 of his 'Valk-vogels' two adults, viz. No. 1, a male from Samao, and No. 3, a male from Sumbawa*, in both of which the under tail-coverts are white, and apparently quite free from bars; but figure No. 2, on the same plate, represents a female

* Mr. Sharpe, in his Catalogue of Accipitres, p. 104, refers this specimen to *U. sylvestris* (Wallace), which, from the locality, seems to be a very probable identification.

from Timor, in which these coverts are given as white, transversely barred with rufous; this female appears to be in full adult dress, with the exception of the tail, on which a brown tint appears in the coloured figure, and may perhaps indicate the remains of immaturity.

Temminck's figure of an adult of this species in the Pl. Col. pl. 43, represents the under tail-coverts as white and unbarred: the locality whence the specimen drawn was obtained is not mentioned; but it would seem to have been an example preserved in the Paris Museum, according to the rule quoted in 'The Ibis' for 1879, p. 339 (footnote). Count Salvadori states that Temminck's type specimen was from Timor, and is preserved at Leyden (*vide* Ibis, 1879, p. 319, and 'Ornitologia della Papuasie e delle Molucche,' vol. i. p. 62).

Further investigation is desirable as to whether there is a constant difference, as regards adult birds, in the coloration of the under tail-coverts, between the northern and southern races of *Urospizias torquatus*; and if such a difference is established, the latter should be distinguished as *U. sharpei* (Ramsay*).

I may here observe that Count Salvadori, both in his 'Pro-dromus' and in his larger work, appears to omit all mention of the peculiar Flores Hawk, *Urospizias sylvestris* (Wallace), either as a distinct species or as a synonym of *U. torquatus*; but he speaks of *U. torquatus* as having been brought from Flores by Mr. Wallace. I have never seen a bird which appeared to me to be referable to the true *U. torquatus* from that island; and a pair of *U. sylvestris* from thence which are preserved in the Norwich Museum, seem to me to be readily distinguishable from *U. torquatus* by their much smaller size; they measure as under:—

	Wing. in.	Tarsus. in.	Middle toe s. u. in.
♂	7·30	2·0	1·05
♀	8·20	2·10	1·30

* *Vide* Proc. Linn. Soc. New S. Wales, vol. iii. pp. 173, 248.

These measurements differ but very little from those given by Mr. Wallace in the P. Z. S. 1863, p. 487, and by Mr. Sharpe in his Catalogue of Accipitres, p. 105, but will be seen, by a reference to the measurements which I have given above of *U. torquatus*, to be considerably less than those of the smallest examples, of the like sex, in that species.

XXII.—*Descriptions of some new Species of South-American Birds of the families Tyrannidæ and Formicariidæ.* By P. L. SCLATER and OSBERT SALVIN.

(Plate IX.)

AMONGST the recent additions to our collections are examples of certain species of the families Tyrannidæ and Formicariidæ, which seem to be undescribed.

They may be characterized as follows:—

1. TODIROSTRUM SIGNATUM.

Todirostrum maculatum, Scl. & Salv. P. Z. S. 1873, p. 278 (nec Desm.).

Supra olivaceum, capite summo et nucha plumbeis, frontis et pilei antici plumis medialiter vix nigricantibus; alis et cauda fusco-nigris distincte olivaceo limbatis; gula alba, hac et pectore nigro vittatis, abdomine toto flavo, hypochondriis olivaceo striatis; rostro nigricante, mandibulæ basi subtus albicante; pedibus plumbeis: long tota 3·5, alæ 1·9, caudæ 1·5.

Hab. Amazonia: Nauta (*Bartlett*), Pebas (*Hauxwell*), Yquitos (*Whitely*).

Obs. *T. maculato*, Desm., affine, sed capite summo plumbeo nec nigro facile distinguendum.

The recent acquisition of specimens of the true *T. maculatum* from Bartica Grove, British Guiana, which were sent us by Mr. H. Whitely, has enabled us to compare with them Amazonian specimens formerly referred by us to that species. We now find that the birds from Amazonia are really quite distinct, having a grey instead of a black crown, and want-